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THE FEVER

THAT OCCURRED IN THE MAGDALENE ASYLUM OF
EDINBURGH, IN THE SPRING OF 1821,

AS ILLUSTRATING THE

INFLUENCE OF PANIC

IN PROPAGATING

CONTAGIOUS DISEASES.

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*From the Transactions of the Medico-Chirurgical Society
of Edinburgh, Vol. I.*

R38232

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THAT there are various classes of disease, which may be propagated by the simple influence of panic and imitation, is a fact which has been long established in medical science.

In *Nervous Diseases*, it was placed beyond doubt by the well known history of Abraham Boerhaave*, and the not less decisive case of the charity-children of the parish of St Roch, at Paris, in 1782 †.

* Impetum faciens dictum, &c. p. 355.

† Falconer on the Passions, p. 66.

The diseases to which sailors and soldiers are liable on service, have also been long recognised as subject to the influence of the mind. The observations of our early circumnavigators soon led them to see, that a cheerful and buoyant spirit was the great antidote against the many evils that were wont to assail them. Our army-surgeons likewise assure us, that so long as expectation and prosperity animate the soldier's hopes, he suffers but little from those privations and toils, which, upon a reverse, straightway induce the long catalogue of the diseases of a camp. I quote the following well authenticated case, as the most striking I have met with, in proving the astonishing influence of the mind on the class of diseases now alluded to.

“ The city of Breda, from a long siege (in 1625),
“ suffered all the miseries that fatigue, bad provi-
“ sions, and distress of mind, could bring on its in-
“ habitants. Among other misfortunes, the scurvy
“ made its appearance, and carried off great num-
“ bers. This, added to the other calamities, in-
“ duced the garrison to incline towards a surrender
“ of the place, when the Prince of Orange, anxious
“ to prevent its loss, and unable to relieve the gar-
“ rison, contrived to introduce letters addressed to
“ the men, promising them the most speedy assist-
“ ance. These were accompanied with medicines
“ against the scurvy, said to be of great price, but
“ of still greater efficacy. The effects of this de-
“ ceit were truly astonishing. Three small vials of
“ medicine were given to each physician. It was

“ publicly given out that three or four drops were
“ sufficient to impart a healing virtue to a gallon
“ of liquor. We now displayed our wonder-work-
“ ing balsams. Nor were even the commanders let
“ into the secret of the cheat. They flocked in
“ crowds about us, every one soliciting that part
“ may be reserved for his use. Cheerfulness again
“ appears in every countenance, and an universal
“ faith prevails in the sovereign virtues of the reme-
“ dies. The effect of this delusion was truly asto-
“ nishing, for many were quickly and perfectly re-
“ covered. Such as had not moved their limbs for
“ a month before, were seen walking in the streets,
“ with their limbs sound, straight, and whole.
“ Many who had declared that they had been ren-
“ dered worse by all former remedies, recovered in a
“ few days, to their inexpressible joy, and the no
“ less general surprise, by their taking what we af-
“ firmed to be their gracious Prince’s cure*.”

“ This curious relation,” observes Dr Lind, “ would
“ perhaps hardly gain credit, were it not, in every
“ respect, consonant to the most accurate observa-
“ tions, and best attested descriptions of that dis-
“ ease. It is given us by an eye-witness, an author
“ of great candour and veracity, who, as he informs
“ us, wrote down every day the state of his patients,
“ and seems more to be surprised with their unex-
“ pected recovery, than he probably would have
“ been had he been acquainted with the nature of

* Frederick Vander Mye, *De Morbis Bedanis*, &c.

“ this surprising malady. An important lesson,” adds Dr Lind, “ is hence to be learned in physic,— “ the wonderful and powerful influence of the passions of the mind on the states and disorders of “ the body *.”

I will not venture to say that the following history is so striking as the above. But it regards a different and not less interesting class of disease, viz. the Common Infectious Fever of this country and climate; and although the effect of panic is universally acknowledged in this class of disease, yet, from there being no recorded cases which establish the fact, the opinion appears to rest on no better foundation than suspicion and general analogy. In truth, the usual circumstances in which an epidemic occurs, afford no opportunity of distinguishing the operation of this from the operation of the other causes which contribute to its progress. The native malignity of the disease,—the wretchedness and destitution of those among whom it prevails,—the panic and anxiety of mind which are excited,—all concur to produce the actual amount of disorder; and few or no data are supplied, by which we may estimate the separate influence of any one of these concurring causes, and assign to it its just share in producing the combined result.

The following occurrence appeared interesting to me, as exhibiting, in its simplest form, the effect produced by depression and anxiety of mind in common Fever; and I now submit it to the judg-

* Lind on Scurvy, p. 349.

ment of the Society, only premising further, that, like Vander Mye, I kept a regular record of the facts as they happened ; and as to the candour with which the statement has been drawn up, I must, like him, rely upon the good opinion of my friends, and the intelligent discrimination of those to whom I have the honour of addressing myself.

On visiting the Magdalene Asylum on Monday, the 2d of April 1821, I learned that a girl was indisposed, and in bed. I was informed that in the morning she had gone, in her usual health, to the washing-tub, her general occupation, and that she had scarcely commenced, ere she complained of violent pain in the head, particularly the forehead, attended with giddiness, sickness, cold shivering, and occasional flushings, together with pain in the back, and uneasiness in the limbs. I found the pulse at 96 ; the tongue foul, and the thirst considerable. Previous to my seeing her, she had taken some opening medicine, which had considerably relieved the head.

Fever was at this time prevalent in the town ; and, perceiving the possibility of infection, I directed her to be immediately removed to the sick-room, and there to be kept as isolated as possible ; her bed-clothes to be placed in cold-water, her room to be well ventilated, and then locked up. I ordered an emetic to be given immediately, and a smart purge to be administered a couple of hours afterwards.

I again saw her on Tuesday. The medicines had operated powerfully, but without any marked alleviation of symptoms; and now recognising her as labouring under continued fever, I sent her, in conformity to the invariable practice of the establishment in cases of infectious diseases, to the Queensberry-House. I ordered all the linens to be put into cold water, and the sick-room to be fumigated.

Next day (Wednesday), I found that, on the preceding evening, two other girls, oppressed with disease, had betaken themselves to bed. They had all the symptoms of continued fever distinctly but not very violently marked. They were immediately sent to Queensberry-house; and the precautionary measures which had been used in the former case were carefully repeated in the present.

In an institution where there are from forty to fifty individuals, necessarily confined within their own premises, and which is frequently visited by ladies, whom the purest benevolence incites to hold intercourse with the most degraded of their sex, it is particularly necessary to guard against the germ of contagion. These considerations led to the very diligent use of all the means generally regarded as most efficacious in preventing the spread of infection; and the anxious employment of these precautions probably attracted the attention, and awakened the fears of the inmates, who, cut off from intercourse with the world, are

peculiarly alive to all that takes place within the walls of the Institution.

Be this as it may, a very decided alarm now began to spread among the women. This apprehension was heightened, from its being supposed that those already suffering caught their complaints from clothes brought to the house to be washed, and to which a suspicion of infection was attached.

At an early visit (about 11 A. M.) on Thursday, I found that three others had sickened during the preceding evening, and had betaken themselves to the sick-room; and that, during the course of the morning, five more had reported themselves sick. On seeing them, I immediately ordered them off to the hospital; but before this could be effected, three more had fallen under the disease. They were all apparently very ill; some with cold tremors and shiverings, others with flushed face and full pulse; some were overcome with nausea and headache, others with retching and vomiting. The whole, amounting to eleven individuals, left the house at four in the afternoon. I ordered their linen to the tub; directed every room, and especially those which any of the women had occupied, to be fumigated; in short, the whole house to be washed and ventilated in the most thorough manner possible. Next day I visited these cases in the hospital. They all appeared decided cases of idiopathic fever, and were so regarded and treated by the learned Professor of the Practice of Physic.

At my evening visit a few hours afterwards (at 9 P. M.), I found eight more cases already in the sick-room. These appeared quite as ill as those I had seen in the morning. Some were leaning their heads against the cold wall from the violence of the headache; some were retching and vomiting, unable to lie down; some were shivering from cold, with the *cutis anserina*, and others flushed and burning with heat.

Here, then, in the course of four days, out of a community of less than fifty individuals, there were twenty-two apparently labouring under fever. Some had been ill for several days, and their cases were putting on all the decided features of synochus; and the latter cases appeared even more distressing than the former. The minds of the most stout hearted in the house, not excepting the superintendants, participated in the alarm; and some of the most active and intelligent of the community were prevented from succumbing under their apprehensions and fatigue, solely from the necessity they felt to exert themselves to the utmost.

It now struck me that there was certainly much delusion in all this, and that much must be owing to panic and imitation. Determining, at all events, to act upon this belief, I went to the sick-room, and, in very decided language, stated my opinion. I told them that such rapid spread of disease was never heard of, and insisted that the fumigation must have fortified them against the most virulent contagion:—that though I had no reason to sup-

pose that they wished to deceive me, yet I was satisfied they were deceiving themselves;—that they were yielding to their fears alone, and getting ill merely because others had done so before them. I also collected the women that had hitherto remained well, and pointedly stated the same truths to them. I assured them that they were quite fortified against all infection;—that most of those who had taken ill had probably injured themselves by their apprehensions;—that they had thus exposed themselves to the disagreeable process of a long illness;—that I had seen them in the hospital undergoing a severe treatment, and a painful regimen;—that there was no fear for them, and if they would only keep a good heart, I would insure them against indisposition.

The effects produced were as decisive as I could have wished. The minds of all in the house, were immediately re-assured. The tide of opinion set in in the contrary direction; and now they were as confident as formerly they had been desponding. Of the eight patients then in the sick-room, several recovered in the course of the same night. They found that they could sit up, and walk about a little.

Next morning this change in the general mind was still more apparent. Several were going about their usual employments, who were far fitter for their beds; and one girl in particular, who was really oppressed with disease, and threatened with severe typhus, disobeyed my positive injunctions to lie down. With difficulty she was persuaded to take an eme-

tic and cathartic, which for a time relieved her. After much struggling for two or three days, she was at length forced to yield to the progress of the complaint, and was conveyed to the hospital. The other seven, however, were speedily re-established in perfect health, and in a few days afterwards they were all engaged in their usual occupations.

Of the other inmates of the house, in like manner, none were now taken ill for the period of twenty-three days. By this time several had returned from the hospital, and relapsing, were sent back again. On the 28th of April, the first new case was reported; on the 30th, the second; on the 2d of June, the third; and on the 28th June, the fourth and last; and from that day to this we have had no threatening of continued fever in the Institution.

The change of mind, therefore, which was induced on the evening of the 5th of April, appears effectually to have stopt the progress of the disease in seven incipient cases, and to have entirely checked the fearfully rapid progress which it was every moment making through the house.

For further satisfaction, I shall subjoin two or three of the cases, taken at random from the Hospital-books of the Queensberry-house, supplied to me by the kindness of Dr Home and Dr Dumbreck, under whose immediate charge the patients were.

I.

April 5th 1821.—Elizabeth C——, æt. 23, from Magdalene Asylum. Complains of slight headache, pain of back, nausea, inclination to vomit. Pulse 72, full. Tongue clean. Bowels regular.

Was taken ill this morning with these symptoms and cold shivering.

Secentur capilli.

Sumat Pulv. Ipecac. ℥j. pro emetico,
et hab. cras mane Sulph. Magn. ℥j.

Lavat. tepida pro cute.

6th.—Emetic operated freely, and afforded great relief to the headache. Still complains of pain of back and right side, as also of nausea. Salts have not yet operated. Pulse 76, soft. Tongue pretty clean.

Applic. Empl. Lyttæ pectori.

Hab. Infus. Sennæ ad alvi plen. solutionem.

7th.—Pain of breast relieved. Nausea and headache diminished, but complains of vertigo. Pulse 76, full. Tongue moist, and nearly clean. Skin moist, with some perspiration.

Applic. Hirudines viij. capiti.

Rep. Cathart. ex Sulph. Magn. cras mane.

8th.—Slept ill. Headache and vertigo relieved by the leeches. Still complains of pain of breast. Bowels not yet affected by the salts. Tongue clean and moist. Thirst diminished. Pulse 76, full.

Sit V. S. vespere.

Contin. Cathart. ad alvi plenissim. solut.

9th.—Was bled last night to \bar{z} xxiv., with some relief at the time; but during the night the pain of side returned, and still continues. Slept ill. Complains of pain of back and thirst. Occasional rigors. Bowels freely opened by cathartic. Tongue clean and moist. Pulse 120. Heat 100°. Skin warm and moist.

Vespere sit V. S.

Et Applic. Epispast. parti dolenti.

10th.—Was bled last night to \bar{z} xxiv., with immediate relief. Pain of side greatly diminished. Still complains of pain of back. Blood covered with a buffy coat, and somewhat cupped. Has slight sickness. Bowels open. Tongue clean. Some thirst. Skin cool and moist. Pulse 100, of moderate strength.

Utat. potu ex acido vegetab.

11th.—Slept ill. Pain of breast gone; that of back still continues. Pulse 112. Skin warm. Heat 100°.

R Magn: \bar{z} j.

Aq. Menth. Piperit. \bar{z} vj.

Syrup. Zingiberis, \bar{z} ss. Mis.

Capt. \bar{z} j. 2^{nda} q. q. h.

12th.—Nausea relieved by the magnesian mixture. Slept ill in the early part of the night from a return of the nausea, which still continues. Tongue clean, moist, and tremulous. Pulse 116, of moderate strength. Heat 99°. Considerable thirst, and little appetite, complaining of nausea, after taking food.

Repet. Mist. Magnes.

13th.—Makes no complaint. Pulse 108.

15th, Makes no complaint but of weakness. Pulse 84.

21st, Convalescent.

23d, Last night attacked with rigors; bad night; headache; nausea. Pulse 140. Tongue moist. Pain of right side.

Statim capt. solut. Sulph. Magn.
ft. V. S.
et applicet. Epispast.
Inhalet. vapor. aquæ tepidæ.

24th, Twenty ounces of blood were drawn from the arm immediately after the visit, with some relief to the pain of breast, which has since returned, and continues unabated. Blister rose, and discharged well. Cathartic operated freely. Headache easier, but nausea continues. Pulse 120, less strong. Heat 98°.

25th, In consequence of pain of side continuing unabated, 20 oz. of blood were drawn from the arm, with considerable relief. Slept ill towards morning. Complains of Tinnitus aurium, vertigo, and faintness. Bowels confined. Tongue clean and moist. Considerable thirst. Pulse 120, weak. Skin cool.

Applr. Hirudines capiti.
Capt. Infus. Cathart. ℥ij. ad alv. solut.

26th, Leeches bled well, and relieved the head. Cathartic operated freely. Pain of side easier, but complains of several pains of limb. Pulse 120, weak. Slept ill.

Utatur Mist. Diaphoret.
Pediluv. tepidum.

27th, An anodyne draught was given last night, which procured some sleep. Complains of much pain in the right hypochondrium, increased on pressure or inspiration. Still

complains of pains of joints. Pulse 108. Perspired much during the night.

Repet. Mist. Diaphoret.

28th, Passed a tolerable night, and feels refreshed. Pain of right side easier.

May 2d, Slept well. Complains of return of pain in right side. In other respects feels well. Bowels open. Pulse 100, rather strong.

3d, Slept well. Pain of side easier. Pulse 88.

7th, Convalescent. To have common diet.

Dismissed cured.

II.

May 30th, 1821.—Anne D——, æt. 17, from Magdalene Asylum. Complains of headache, pain of right side of thorax, preventing free inspiration, with nausea. Bowels regular. Tongue loaded. Pulse 80, soft. Heat 102°.

Was seized yesterday with rigors, headache, and vomiting. Has used no remedies.

Hab. Pulv. Ipecac. ℥j. pro emetico.

Cras mane Sulph. Magn. ℥j.

Lavatio frigida.

31st.—Emetic operated freely, and brought off a considerable quantity of green fluid. No effect from the salts. Slept well. Complains of pain of right side, and is unable to take a full inspiration. Headache easier. Tongue cleaner. Some thirst. Pulse 100, sharp. Heat 98. Skin cool.

Statim Infus. Cathart.

Cont. Lavat. frigida.

ft. V. S. vesperc.

June 1st.—Was bled last night to ℥xiv., without relief to pain of side, which still continues severe. Bowels freely moved by the Senna. Tongue white. Considerable thirst. Pulse 104, less strong. Skin warm and moist.

Applic. Vesicat. pectori.

Inhal. vapores aquæ.

Vespere, si symptomât. haud leniora.

ft. V. S.

Rep. Cathart. cras mane.

2d.—Blister rose, and discharged well. One copious stool last night, but none to-day. Passed a restless night. Pain of side removed. Tongue nearly clean. Some thirst. Pulse 100. Skin cool.

Rep. Infus. Cathart. c. m.

3d.—Senna operated freely. Slept well. Complains of pain of throat, affecting deglutition. Tonsils slightly inflamed. Pulse 120. Skin moist. Tongue nearly clean.

Utat. Mist. Diaphoret.

5th.—Improving.

9th.—Dismissed cured.





